L Number	Hits	Search Text	DB	Time stamp
1	8	"2845581" "4426670"	USPAT;	2004/03/20 18:58
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2	12	"2845581" "4426670" "4176388"	USPAT:	2004/03/20 19:10
-	12		US-PGPUB	
3	33	"2845581" "4426670" "4176388" "4205361" "4183071"	USPAT;	2004/03/20 19:25
3	33	2040001 4420070 4170000 4200001 4100071	US-PGPUB	2004/00/20 10.20
	40	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT:	2004/03/20 19:34
4	10	· ·	US-PGPUB	2004/03/20 19.34
_	_	phase same current and phase same voltage		0004/00/00 40:00
5	2	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT;	2004/03/20 19:26
		phase same current and phase same voltage and sample	US-PGPUB	
		same value		
6	4	("4073009" "4187525" "4209741" "4377833").PN.	USPAT	2004/03/20 19:31
7	6	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:33
		"4636909").PN.		
8	0	("4073009" "4187525" "4209741" "4377833") PN. and	USPAT	2004/03/20 19:32
		oscillation same identification		
9	0	("4073009" "4187525" "4209741" "4377833").PN. and	USPAT	2004/03/20 19:32
		oscillation same identify		
10	0	("4073009" "4187525" "4209741" "4377833").PN. and	USPAT	2004/03/20 19:32
		oscillation and identif\$7		
12	0	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:33
'-	_	"4636909").PN.and oscillation same identif\$7		
11	1	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:57
''		"4636909").PN.and oscillation and identif\$7		
13	12	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:51
13	12	same identif\$7 and impedance and power and oscillation	US-PGPUB	200 ,,00,20 10,01
		same model	0010.00	
44	0	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:52
14	0	same identif\$7 and impedance and power and oscillation	US-PGPUB	2004/00/20 10.02
			00-606	
		same model and ((("2845581" "4426670" "4176388"		
		"4205361" "4183071") and pole) or (("2845581" "4426670"		
		"4176388" "4205361" "4183071") and phase))	LICDAT	2004/03/20 19:52
15	0	phase same current and phase same voltage and oscillation	USPAT; US-PGPUB	2004/03/20 19.32
		same identif\$7 and impedance and power and oscillation	03-FGF0B	
		same model and ((("2845581" "4426670" "4176388"		
		"4205361" "4183071") and pole) or 3p or (("2845581"		
	_	"4426670" "4176388" "4205361" "4183071") and phase))	LIODAT	0004/03/00 40:57
16	1	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:57
		same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model and least with square		0004/00/00 45 75
17	4	("3959724" "4055803" "4197582" "4931725").PN.	USPAT	2004/03/20 19:56
18	0	6104182.URPN.	USPAT	2004/03/20 19:57
32	1	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:58
		"4636909").PN.and oscillation and identif\$7		
33	1	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:58
		same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model and least with square		

L Number	Hits	Search Text	DB	Time stamp
1	8	"2845581" "4426670"	USPAT;	2004/03/20 18:58
	_		US-PGPUB	
2	12	"2845581" "4426670" "4176388"	USPAT:	2004/03/20 19:10
-	,_	25.0001	US-PGPUB	
3	33	"2845581" "4426670" "4176388" "4205361" "4183071"	USPAT:	2004/03/20 19:25
	33	2040001 4420070 4170000 4200001 4100071	US-PGPUB	200-1/00/20 10.20
4	10	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT:	2004/03/20 19:34
*	10	phase same current and phase same voltage	US-PGPUB	2004/03/20 19.54
5	2	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT:	2004/03/20 19:26
5	2		US-PGPUB	2004/03/20 19.20
		phase same current and phase same voltage and sample	US-PGPUB	
		same value	LICDAT	0004/00/00 40:04
6	4	("4073009" "4187525" "4209741" "4377833").PN.	USPAT	2004/03/20 19:31
7	6	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:33
		"4636909").PN.		
8	0	("4073009" "4187525" "4209741" "4377833").PN. and	USPAT	2004/03/20 19:32
		oscillation same identification		
9	0	("4073009" "4187525" "4209741" "4377833").PN. and	USPAT	2004/03/20 19:32
		oscillation same identify		
10	0	("4073009" "4187525" "4209741" "4377833").PN. and	USPAT	2004/03/20 19:32
ł		oscillation and identif\$7		
12	0	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:33
		"4636909").PN.and oscillation same identif\$7		
11	1	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:57
		"4636909").PN.and oscillation and identif\$7		
13	12	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:51
		same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model		
14	0	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:52
`		same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model and ((("2845581" "4426670" "4176388"		
["4205361" "4183071") and pole) or (("2845581" "4426670"		
		"4176388" "4205361" "4183071") and phase))		
15	0	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:52
"		same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model and ((("2845581" "4426670" "4176388"		
		"4205361" "4183071") and pole) or 3p or (("2845581"		
		"4426670" "4176388" "4205361" "4183071") and phase))		
16	1	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:57
	•	same identif\$7 and impedance and power and oscillation	US-PGPUB	
		same model and least with square	-555	
17	4	("3959724" "4055803" "4197582" "4931725").PN.	USPAT	2004/03/20 19:56
18	0	6104182.URPN.	USPAT	2004/03/20 19:57
32	1	("3629658" "4342063" "4352136" "4426670" "4591992"	USPAT	2004/03/20 19:58
32	'	(3029036 4342003 4332136 4426676 4391992 4636909").PN.and oscillation and identif\$7	33. 7.1	
33	1	phase same current and phase same voltage and oscillation	USPAT;	2004/03/20 19:58
33	'	same identif\$7 and impedance and power and oscillation	US-PGPUB	200-1/00/20 10:00
		same model and least with square	33 , 3, 35	
	<u></u>	Sumo model and least mai square		

•	U	1	Document ID	Issue Date	Pages	Title	Current OR
1			US 6104182 A	20000815	12	Method of deriving a signal indicating an oscillation in an electric power supply system	324/142

	Current XRef Retrieval Classif		Inventor	S	С	P	2	3	4	5
1	324/140R; 324/141		Jurisch, Andreas et al.	⊠						

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1	US 6104182	

L Number	Hits	Search Text	DB	Time stamp
1	8	"2845581" "4426670"	USPAT;	2004/03/20 18:58
			US-PGPUB	
2	12	"2845581" "4426670" "4176388"	USPAT;	2004/03/20 19:10
1			US-PGPUB	
3	33	"2845581" "4426670" "4176388" "4205361" "4183071"	USPAT;	2004/03/20 19:25
			US-PGPUB	
4	10	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT;	2004/03/20 19:26
		phase same current and phase same voltage	US-PGPUB	
5	2	("2845581" "4426670" "4176388" "4205361" "4183071") and	USPAT;	2004/03/20 19:26
		phase same current and phase same voltage and sample	US-PGPUB	
		same value		

	U	1	Document ID	Issue Date	Pages	Title	Current OR
1	⊠		US 4731688 A	19880315	1	Range limitation for a protection device in a power supply network	361/65
2	⊠		US 4426670 A	19840117	5	Method of protection of electrical networks in the event of power transients by means of a surge arrester and a surge arrester for the performance of the method	

	Current XRef	Retrieval Classif	Inventor	S	C	Ρ	2	3	4	5
1	324/522; 361/80; 361/86; 700/293		Nimmersjo, Gunnar et al.							
2	361/42; 361/65		llar, Franc et al.							

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1	US 4731688	
2	US 4426670	

	U	1	Document ID	Issue Date	Pages	Title	Current OR
1	×		US 6697243 B1	20040224	5	Under voltage release with an electromagnet and clocked holding current circuit	361/92
2	Ø		US 6233129 B1	20010515	6	Undervoltage circuit breaker with an electromagnet	361/92
3	×		US 6105333 A	20000822	13	Device for fixing a movable window pane on a window regulator of a motor vehicle	52/716.8
4			US 5914849 A	19990622	18	DC actuator control circuit with voltage compensation, current control and fast dropout period	361/187
5	×		US 5907467 A	19990525	14	Trip device for an electric powered trip unit	361/170
6	×		US 5754386 A	19980519	15	Trip device for an electric powered trip unit	361/154
7	Ø		US 5740027 A	19980414	15	Trip device for an electric powered trip unit	363/97
8			US 5737172 A	19980407	24	Electromagnetic contactor and a method of controlling the same	361/154
9	×		US 5729119 A	19980317	15	Dual mode power supply and under voltage trip device	323/222
10			US 5540840 A	19960730	13	Use of fluidized bed reactors for treatment of wastes containing organic nitrogen compounds	210/617
11	⊠		US RE35190 E	19960326	9	Plug-in power supply	363/146
12	Ø		US 5359309 A	19941025	9	Multiple pole solenoid using simultaneously energized AC and DC coils	335/256
13	Ø		US 5281939 A	19940125	10	Multiple pole solenoid using simultaneously energized AC and DC coils	335/256
14	×		US 5142435 A	19920825	5	Filter capacitor precharge apparatus	361/160
15	×		US 5124566 A	19920623	5	Shutoff circuit for sensor controlled switch	307/116
16	⊠		US 4941506 A	19900717	7	Sanitary mixing valve	137/625.4
17	Ø		US 4901219 A	19900213	9	Plug-in power supply	363/146

	Current XRef	Retrieval Classif	Inventor	s	С	Р	2	3	4	5
1	361/115; 361/153; 361/187		Pancke, Andreas et al.							
2			Baumgartl, Ulrich et al.							
3	52/204.64; 52/204.66; 52/204.69; 52/716.7		Meesemaecker, Thierry et al.							
4	361/154; 361/160		Perreira, G. Stephen							
5			Barbour, Erskine							
6			Barbour, Erskine et al.							
7	361/92		Akers, Stuart R. et al.					Ο.		
8	307/128; 361/187		Ohtsuka, Shigeharu							
9	323/225; 323/283		Barbour, Erskine							
10	210/621; 210/903; 210/904; 210/908		Heitkamp, Michael A. et al.							
11	361/640		Zylstra, Henry J. et al.							
12	335/266		Juds, Mark A. et al.							
13	335/266		Juds, Mark A. et al.							
14	361/187; 361/195; 361/2		Baumgartner, Kenneth A. et al.							
15	363/89		Hu, Charles C.							
16	137/625.17; 251/127		Bergmann, Konrad							
17	361/640		Erickson, Kenneth W. et al.							

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1	US 6697243	
2	US 6233129	
3	US 6105333	
4	US 5914849	
5	US 5907467	
6	US 5754386	
7	US 5740027	
8	US 5737172	
9	US 5729119	
10	US 5540840	
11	US RE35190	
12	US 5359309	
13	US 5281939	
14	US 5142435	0
15	US 5124566	
16	US 4941506	
17	US 4901219	

	U	1	Document ID	Issue Date	Pages	Title	Current OR
18	×		US 4833563 A	19890523	13	Molded case circuit breaker actuator-accessory module	361/92
19	×		US 4796144 A	19890103	5	Ground fault detector	361/42
20	⊠		US 4788621 A	19881129	13	Molded case circuit breaker multiple accessory unit	361/115
21			US 4780653 A	19881025	5	Anti-stall motor drive	388/822
22	×		US 4772809 A	19880920	9	Switching circuit and a relay device employed to prevent arcing	307/140
23			US 4731688 A	19880315	7	Range limitation for a protection device in a power supply network	361/65
24	⊠		US 4438383 A	19840320	14	Rock crusher motor control circuit for preventing relay drop out	318/799
25			US 4426670 A	19840117	5	Method of protection of electrical networks in the event of power transients by means of a surge arrester and a surge arrester for the performance of the method	361/79
26	×		US 4413255 A	19831101		Fluid level indicator	340/622
27	×		US 4356526 A	19821026		Control circuit for resetting drawout circuit breaker UVR solenoid	361/59
28			US 4205361 A	19800527	7	Undervoltage control apparatus for circuit interrupter	361/92
29			US 4183071 A	19800108	6	Control circuit for resetting circuit breaker UVR solenoid	361/59

	Current XRef	Retrieval Classif	Inventor	s	С	Р	2	3	4	5
18	361/115; 361/187; 361/93.3; 361/93.9		Russell, Ronald R.							
19	361/93.2; 361/93.6		Swift, Glenn W.							
20	361/642; 361/92	344.	Russell, Ronald R. et al.							
21	318/436; 318/531; 361/23; 388/900; 388/903; 388/910		Bezos, Angel P. et al.							
22	307/135; 307/137; 307/141.4; 361/13; 361/8		Koga, Hirofumi et al.							
23	324/522; 361/80; 361/86; 700/293		Nimmersjo, Gunnar et al.							
24	318/806; 361/154; 361/33; 361/92		Etheridge, J. Eugene							
25	361/42; 361/65	,	llar, Franc et al.							
26	137/558; 219/421; 222/146.5; 222/54		Cohen, Sherman E. et al.							
27	361/71; 361/92		Russell, Ronald R.							
28	361/115; 361/154		Shimp, Alan B.	Ø						
29	361/71; 361/92		Russell, Ronald R.	⊠		0				

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18	US 4833563	
19	US 4796144	
20	US 4788621	
21	US 4780653	
22	US 4772809	
23	US 4731688	
24	US 4438383	
25	US 4426670	
26		
27		
28	US 4205361	
29	US 4183071	

	5	1	Document ID	Issue Date	Pages	Title	Current OR
30			US 4176388 A	19791127	5	Control circuit for a contactor	361/196
31	×		US 4092691 A	19780530	12	Protective relay arrangements	361/80
32	⊠		US 3662220 A	19720509	18	TIME DELAY DEVICE	361/97
33			US 2845581 A	19580729	7	Impedance type electronic relay	361/80

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
30	361/194; 361/205; 361/22		Palmer, Norman H. G.	×						
31	361/110; 361/67		Williams, Anthony							
32	361/71		Riebs, Richard E.							
33			HODGES MERWYN E et al.	⊠						

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30	US 4176388	
31	US 4092691	
32	US 3662220	
33	US 2845581	

L Number	Hits	Search Text	DB	Time stamp
1	8	"2845581" "4426670"	USPAT;	2004/03/20 18:58
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			US-PGPUB	
3	33	"2845581" "4426670" "4176388" "4205361" "4183071"	USPAT;	2004/03/20 19:10
-			US-PGPUB	

L Number	Hits	Search Text	DB	Time stamp
1	8	"2845581" "4426670"	USPAT;	2004/03/20 18:58
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2	12	"2845581" "4426670" "4176388"	USPAT;	2004/03/20 19:10
			US-PGPUB	
3	33	"2845581" "4426670" "4176388" "4205361" "4183071"	USPAT;	2004/03/20 19:10
			US-PGPUB	